UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/570,038	02/27/2006	Yuji Okamoto	64985(49381)	1093

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EXAMINER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)
	10/570,038	OKAMOTO ET AL.
	Examiner	Art Unit
	Lisa Lewis	2436

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _09 August 2010_.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _6-15_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _6-15_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application

6)☐ Other: _____ .

DETAILED ACTION

Applicant's response with amendments filed 08/09/2010 has been received and entered.

Applicant has amended claims 6-8, 10, and 11, and has cancelled claims 16 and 17. Claims 6-15 have

been examined on the merits.

Response to Arguments

After further consideration, it is concluded that structural support for the means plus function

limitations of claims 6-15 is found in the instant specification. Therefore, the 35 U.S.C. 112 2nd

paragraph rejection of claims 6-15 regarding means plus function has been withdrawn.

Applicant's arguments regarding the 35 U.S.C. 103 rejection of claims 6-15 have been carefully

considered but are deemed moot in view of new grounds of rejection.

Claim Rejections - 35 USC § 103

1.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness

rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

2.   **Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mutsuaki (JP 2000-**

244753) in view of Yoshiki (JP 11-275326), and further in view of Chrisop et al. (US 2001/0025343).

3.   Regarding claim 6, Matsuaki teaches an image processing apparatus including a storing unit for

storing image data and performing an output process based on the image data stored in the storing unit

(An image memory of a facsimile equipment is used to store image data and an image output part for

outputting stored image data stored in the image memory - see abstract, for example), comprising a

controller including:

        a.   Means for designating the image data stored in the storing unit and accepting an

instruction for concealment of the designated image data (A data specifying part is used for

specifying image data in the image memory and a cipher image encoding part is used for

encoding (i.e., concealing) the specified data) - see abstract, for example.

        b.   Means for concealing the designated image data based on the accepted instruction (A

cipher image encoding part is used for encoding (i.e., concealing) the specified data) - see

abstract, for example.

4.   Mutsuaki does not teach a means for nullifying unconcealed image data.

5.   Yoshiki beneficially teaches that to cope with an image storing memory being full, the oldest

non-protected image is deleted (i.e., nullified) from the image memory - see abstract, and [0048] - [0050],

for example.

6.   Neither Mutsuaki nor Yoshiki teach that the nullifying of the data comprises overwriting the

image data with meaningless data whereby the image is prevented from recurring in the storing unit in

reproducible form.

7.   Chrisop et al. teach a method wherein image data is overwritten by zeros and ones or by random

data and this can be performed a repeated number of times - see abstract, figure 1, and [0044], for

example. Further Chrisop et al. teach that when deleting data or overwriting data, some of the data still

resides in memory - see [0012] and [0013], for example. Christop et al. teach that it is beneficial to

overwrite multiple times, and that several government agencies require at least three overwrites of data -

see [0019].

8.   It would have been obvious to one of ordinary skill in the art at to create the invention as claimed

for the following reasons. It would have been obvious to one of ordinary skill in the art at the time the

claimed invention was made to modify the teachings of Mutsuaki by allowing non-protected images to be deleted, for the purpose of freeing up memory space, based upon the beneficial teachings provided by Yoshiki. It also would have been obvious to one of ordinary skill in the art at the time of the claimed invention to modify the teachings of Mutsuaki and Yoshiki by allowing the nullification to be overwriting the image data with meaningless/random data multiple times, for the purpose of protecting the image data from being reproduced, based on the beneficial teachings provided by Chrisop et al. These modifications would result in increased security, which is an obvious benefit to the skilled artisan. Additionally, the cited references are in the field of image storing devices and encryption, as is the current application, and thus, are in analogous arts.

9. **Claims 7, 10, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mutsuaki in view of Yoshiki, and Chrisop et al. and further in view of Osamu et al. (JP 05-022614).**

10. The teachings of Mutsuaki, Yoshiki, and Chrisop et al. are relied upon for the reasons set forth above.

11. Regarding claim 7, Mutsuaki, Yoshiki, and Chrisop et al. do not teach means for detecting whether or not a processing unit for processing the image data is provided and an operation state thereof, or means for determining a concealing method based on detected results.

12. Osamu et al. beneficially teach a facsimile device including a secrecy device, wherein if the secrecy device is in a non-operating state, the components exchange data serially for compression (i.e., concealment), wherein if the secrecy device is in an operating state, the components exchange data indirectly for compression - see [0014] - [0018], for example.

13. It would have been obvious to one of ordinary skill in the art at to create the invention as claimed for the following reasons. It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to modify the teachings of Mutsuaki, Yoshiki, and Chrisop et al. by allowing

the device to include a means for detecting operating or non-operating modes for the concealment device

and basing the concealment on the mode, for the purpose of efficiency and security, based upon the

beneficial teachings provided by Osamu et al. Additionally, the cited references are in the field of image

reading devices and encryption, as is the current application, and thus, are in analogous arts.

14.   Regarding claims 10 and 13, Matsuaki teaches:

> c.   The concealing method is setting of authentication information corresponding to the
>
> image data (A password is associated with the encrypted data) - see [0014], for example.
>
> d.   The controller further comprises:
>
>> i.   Means for accepting authentication information (A password input unit) - see
>>
>> [0014], for example.
>>
>> ii.   Means for verifying the authentication information set to the image data with the
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>> accepted authentication information (A password judgment part judges whether the
>>
>> password is proper) - see [0014], for example.
>>
>> iii.   Means for permitting the output process of the image data in the case where the
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>> authentication information set to the image data matches the accepted authentication
>>
>> information (The image data is output if the password is proper (i.e., if the inputted
>>
>> password matches the correct password) - see [0014], for example.
>
> e.   The controller decodes encrypted image data in the case of performing an output
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> operation based on the image data (A cipher image decoding part is used for restoring cipher
>
> image data) - see abstract, for example.

15.   **Claims 8, 9, 11, 12, 14, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable**

over Mutsuaki in view of Osamu et al. and Yoshiki, and further in view of Chrisop et al.

16.   Regarding claim 8, Matsuaki teaches an image processing apparatus including a storing unit for storing image data and performing an output operation based on the image data stored in the storing unit(An image memory of a facsimile equipment is used to store image data and an image output part for outputting stored image data stored in the image memory - see abstract, for example), comprising a controller including:

      f.   Means for designating the image data stored in the storing unit and accepting an instruction for concealment of the designated image data (A data specifying part is used for specifying image data in the image memory and a cipher image encoding part is used for encoding (i.e., concealing) the specified data) - see abstract, for example.

      g.   Means for concealing the designated image data based on the accepted instruction (A cipher image encoding part is used for encoding (i.e., concealing) the specified data) - see abstract, for example.

17.   Mutsuaki does not teach means for detecting whether or not a processing unit for processing the image data is provided and an operation state thereof, or means for determining a concealing method based on detected results.

18.   Osamu et al. beneficially teach a facsimile device including a secrecy device, wherein if the secrecy device is in a non-operating state, the components exchange data serially for compression (i.e., concealment), wherein if the secrecy device is in an operating state, the components exchange data indirectly for compression - see [0014] - [0018], for example.

19.   Neither Mutsuaki nor Osamu et al. teach a means for nullifying unconcealed image data.

20.   Yoshiki beneficially teaches that to cope with an image storing memory being full, the oldest *non-protected* image is deleted (i.e., nullified) from the image memory - see abstract, and [0048] - [0050], for example.

21.   Neither Mutsuaki nor Yoshiki teach that the nullifying of the data comprises overwriting the image data with meaningless data whereby the image is prevented from recurring in the storing unit in reproducible form.

22.   Chrisop et al. teach a method wherein image data is overwritten by zeros and ones or by random data and this can be performed a repeated number of times - see abstract, figure 1, and [0044], for example. Further Chrisop et al. teach that when deleting data or overwriting data, some of the data still resides in memory - see [0012] and [0013], for example. Christop et al. teach that it is beneficial to overwrite multiple times, and that several government agencies require at least three overwrites of data - see [0019].

23.   It would have been obvious to one of ordinary skill in the art at to create the invention as claimed for the following reasons. It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to modify the teachings of Mutsuaki by allowing the device to include a means for detecting operating or non-operating modes for the concealment device and basing the concealment on the mode, for the purpose of efficiency and security, based upon the beneficial teachings provided by Osamu et al. It would have also been obvious to one of ordinary skill in the art at the time the claimed invention was made to modify the teachings of Mutsuaki and Osamu et al. by allowing non-protected images to be deleted, for the purpose of freeing up memory space, based upon the beneficial teachings provided by Yoshiki. It also would have been obvious to one of ordinary skill in the art at the time of the claimed invention to modify the teachings of Mutsuaki, Osamu, and Yoshiki by allowing the nullification to be overwriting the image data with meaningless/random data multiple times, for the purpose of protecting the image data from being reproduced, based on the beneficial teachings provided by Chrisop et al. Additionally, the cited references are in the field of image reading devices and encryption, as is the current application, and thus, are in analogous arts.

24.   Regarding claims 9 and 11, Matsuaki teaches that:

h.   The concealing method is cipher image encoding of the image data (i.e., encrypting) - see abstract, for example.

i.   The controller includes means for decoding the encrypted image data in the case of performing an output operation based on the image data (A cipher image decoding part is used for restoring cipher image data) - see abstract, for example.

25.   Regarding claims 12, 14, and 15, Matsuaki teaches:

j.   The concealing method is setting of authentication information corresponding to the image data (A password is associated with the encrypted data) - see [0014], for example.

k.   The controller further comprises:

        iv.   Means for accepting authentication information (A password input unit) - see [0014], for example.

        v.   Means for verifying the authentication information set to the image data with the accepted authentication information (A password judgment part judges whether the password is proper) - see [0014], for example.

        vi.   Means for permitting the output process of the image data in the case where the authentication information set to the image data matches the accepted authentication information (The image data is output if the password is proper (i.e., if the inputted password matches the correct password) - see [0014], for example.

l.   The controller decodes encrypted image data in the case of performing an output operation based on the image data (A cipher image decoding part is used for restoring cipher image data) - see abstract, for example.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lisa Lewis whose telephone number is (571) 270-7724. The examiner can normally be reached on Monday - Friday, 6:30 a.m. - 3:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nasser Moazzami can be reached on (571) 272-4195. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application

Information Retrieval (PAIR) system. Status information for published applications may be obtained

from either Private PAIR or Public PAIR. Status information for unpublished applications is available

through Private PAIR only. For more information about the PAIR system, see http://pair-

direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic

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Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR

CANADA) or 571-272-1000.

/Nasser Moazzami/   /L. L./
Supervisory Patent Examiner, Art Unit 2436   Examiner, Art Unit 2436